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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,642	02/28/2002	Katsuhiko Hiramatsu	L9289.02131	3592

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EXAMINER
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AGHDAM, FRESHTEH N

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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06/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/069,642

Applicant(s)

HIRAMATSU ET AL.

Examiner

Freshteh N. Aghdam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-24 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-24 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Previously, examiner indicated claims 22-24 and 27 as allowable subject matter. However, upon further consideration, a new ground(s) of rejection is made in view of Baum et al, further in view of Parkvall et al and Laakso et al. Therefore, the final rejection has been withdrawn.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al (US 6,385,462), further in view of Parkvall et al (US 6,542,736) and Laakso et al (US 6,603,773).

As to claim 22, Baum discloses a link adaptation method comprising: a measuring section that measures the reception quality of a control channel signal sent from a base station (Col. 4, lines 4-16; Col. 9, lines 60-67; Col. 10, lines 1-21); estimating the reception quality of the data channel signal (i.e. link) based on the reception quality of the control channel (i.e. pilot signal); an estimating section that estimates the reception quality of the data channel signal based on the reception quality

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of the control channel signal and transmit power value information comprising information of variable transmit power values of the control channel signal (Fig. 1, means 107 and 110); a deciding section that decides a modulation system and coding system to be used for the data channel signal using the estimated reception quality of the data channel signal (means 109); and a transmitting section that transmits information of the modulation system and coding system decided by the deciding section to remote apparatus (means 106 and 108). Baum does not expressly teach that in the uplink the link adaptation is performed by the communication terminal apparatus; and also, the reception quality of a data channel is based on the reception quality of the control channel signal and the transmission power values of the control channel signal and data channel signal sent from the base station. Parkvall discloses a communication system and/ or method, wherein the link adaptation is performed in the communication terminal apparatus to compensate for channel quality variations (Col. 2, lines 34-36). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Parkvall with Baum for the reason stated above. Laakso teaches a communication system and/ or method, wherein the reception quality of the data channel signal is based on the reception quality of the control channel signal and the transmission power values of the control channel signal and data channel signal and the transmit power values are variable (Col. 3, Lines 13-20 and 58-67; Col. 4, Lines 1-6, 17-25, and 59-64; Col. 11, Lines 39-59), since the control channel signal and the data channel signal are actually on the same channel but the power control bits are used to determine the quality of the connection; therefore, the power control bits are used to

determine the reception quality of the data channel signal based on the transmit power values of the control channel signal and the data channel signal. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Laakso with Baum and Parkvall in order to control the transmission power with the aim of utilizing the radio resources efficiently (Col. 3, Lines 1-5).

As to claim 23, Parkvall further teaches selecting section for selecting a target base station apparatus with the best estimated reception quality of the data channel signal from among all the base station apparatuses as the requested destination of the data channel signal (Col. 3, Lines 6-9) by the communication terminal apparatus; and transmitting means for transmitting the reception quality of the estimated data channel signal to the target base station (Fig. 4 and 11; Col. 7, Lines 44-47).

As to claims 24 and 27, Parkvall further discloses a receiving section that receives the information of the modulation system and coding system sent from the communication terminal apparatus (Fig. 4); and a transmitting section that transmits the data channel signal in the modulation system and coding system (Fig. 4, means 54 and 56).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**KEVIN BURD**  
**PRIMARY EXAMINER**

June 6, 2007

Freshteh Aghdam  
Examiner  
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